

CLAIMS

1. A diffuser which is placed in front of a sound wave emission side of a sound source;

said diffuser having a configuration wherein a tapered opening space configuration is formed along a sound wave emission direction from said sound source at a region including a generally center portion facing the sound source, and wherein a spatulate opening space configuration is formed on the outer side thereof.

2. A diffuser which is placed in front of a sound wave emission side of a sound source which has a face for emitting sound waves by piston vibrations;

said diffuser having a configuration wherein a tapered opening space configuration is formed along a sound wave emission direction from said sound source at a region including a generally center portion facing the sound wave emission face of the sound source, and wherein a spatulate opening space configuration is formed on the outer side thereof.

3. A diffuser according to either Claim 1 or 2, wherein in front of the tapered opening end of said tapered opening space configuration is formed another tapered opening space

configuration including the generally center portion of the tapered opening end facing the sound source along the sound wave emission direction from this tapered opening end, with a spatulate opening space configuration formed on the outer side thereof.

4. A diffuser which is placed in front of a sound wave emission side of a sound source;

said diffuser having a configuration wherein a region with a fast sound wave emission speed is formed along a sound wave emission direction from said sound source at a region including a generally center portion facing the sound wave emission face, and wherein a region with a slow sound wave emission speed is formed on the outer side thereof.

5. A diffuser which is placed in front of a sound wave emission side of a sound source which has a face for emitting sound waves by piston vibrations;

said diffuser having a configuration wherein a region with a fast sound wave emission speed is formed along a sound wave emission direction from said sound source at a region including a generally center portion facing the sound emission face of the sound source, and wherein a region with a slow sound wave emission speed is formed on the outer side thereof.

6. A diffuser according to either Claim 4 or 5, wherein in front of the tapered opening end of said tapered opening space configuration is formed another region with a fast sound wave emission speed along a sound wave emission direction from said tapered opening end at a region including a generally center portion of the tapered opening end facing the sound source, and wherein another region with a slow sound wave emission speed is formed on the outer side thereof.

7. A diffuser according to any one of the Claims 1 through 6, further comprising a conical center flow plate having a tapered shape with both ends opened, disposed along the sound wave emission direction.

8. A diffuser according to Claim 7, further comprising a conical outer flow plate having a spatulate shape with both ends opened, disposed along the sound wave emission direction on the outer side of said conical center flow plate.

9. A diffuser according to any one of the Claims 1 through 6, further comprising a plurality of center flow plates provided along the sound wave emission direction in

parallel with each other at predetermined spacing introduced therebetween, and inclined at a predetermined angle so as to be tapered as to the sound wave emission direction.

10. A diffuser according to Claim 9, further comprising, on the outer side of said center flow plates, a plurality of outer flow plates provided along the sound wave emission direction in parallel with each other at predetermined spacing introduced therebetween, and inclined at a predetermined angle so as to be spatulate as to the sound wave emission direction.

11. A speaker, wherein a diffuser according to any one of the Claims 1 through 10 is disposed in front of a sound wave emission side of a sound source.

12. A speaker according to Claim 11, further comprising a protective net disposed in front of the sound wave emission side of said sound source, wherein said diffuser is fixed to said protective net.

13. A speaker according to Claim 12, wherein said diffuser is fixed in front of said protective net.

14. A speaker according to Claim 12, wherein said

diffuser is fixed behind said protective net.

15. A speaker according to Claim 12, wherein said diffuser is fixed both in front of and behind said protective net.

16. A speaker according to any one of the Claims 12 through 15, wherein said diffuser is fixed to said protective net by an adhesive member.

17. A speaker according to any one of the Claims 12 through 15, wherein said diffuser is fixed to said protective net by a connecting member.

18. A speaker according to Claim 17, wherein said connecting member is formed of a magnet and a magnet or ferromagnetic member.